Thomas Wachtler

List of Publications by Year
in descending order

62 papers	1,824 citations	430754 18 h-index	315616 38 g-index
69 all docs	69 docs citations	69 times ranked	2062 citing authors

#	Article	IF	Citations
1	A Standards Organization for Open and FAIR Neuroscience: the International Neuroinformatics Coordinating Facility. Neuroinformatics, 2022, 20, 25-36.	1.5	26
2	Recommendations for repositories and scientific gateways from a neuroscience perspective. Scientific Data, 2022, 9, 212.	2.4	3
3	Reproducibility and efficiency in handling complex neurophysiological data. Neuroforum, 2021, .	0.2	3
4	Feed-forward and noise-tolerant detection of feature homogeneity in spiking networks with a latency code. Biological Cybernetics, 2021, 115, 161-176.	0.6	0
5	NFDI-Neuro: building a community for neuroscience research data management in Germany. Neuroforum, 2021, .	0.2	6
6	Better data â€“ better science. Neuroforum, 2020, 26, 119-120.	0.2	0
7	odMLtables: A User-Friendly Approach for Managing Metadata of Neurophysiological Experiments. Frontiers in Neuroinformatics, 2019, 13, 62.	1.3	12
8	Neuroethology of the Waggle Dance: How Followers Interact with the Waggle Dancer and Detect Spatial Information. Insects, 2019, 10, 336.	1.0	13
9	Adaptations during Maturation in an Identified Honeybee Interneuron Responsive to Waggle Dance Vibration Signals. ENeuro, 2019, 6, ENEURO.0454-18.2019.	0.9	1
10	Spatial registration of neuron morphologies based on maximization of volume overlap. BMC Bioinformatics, 2018, 19, 143.	1.2	3
11	A Segmentation Scheme for Complex Neuronal Arbors and Application to Vibration Sensitive Neurons in the Honeybee Brain. Frontiers in Neuroinformatics, 2018, 12, 61.	1.3	8
12	Inhibitory Pathways for Processing the Temporal Structure of Sensory Signals in the Insect Brain. Frontiers in Psychology, 2018, 9, 1517.	1.1	7
13	Toward standard practices for sharing computer code and programs in neuroscience. Nature Neuroscience, 2017, 20, 770-773.	7.1	87
14	Interneurons in the Honeybee Primary Auditory Center Responding to Waggle Dance-Like Vibration Pulses. Journal of Neuroscience, 2017, 37, 10624-10635.	1.7	17
15	Handling Metadata in a Neurophysiology Laboratory. Frontiers in Neuroinformatics, 2016, 10, 26.	1.3	36
16	Wavelength Discrimination in Drosophila Suggests a Role of Rhodopsin 1 in Color Vision. PLoS ONE, 2016, 11, e0155728.	1.1	10
17	Computational Modeling of Color Vision. , 2016, , 243-267.		1
18	Unsupervised neural spike sorting for high-density microelectrode arrays with convolutive independent component analysis. Journal of Neuroscience Methods, 2016, 271, 1-13.	1.3	40

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19	Changes in unique hues induced by chromatic surrounds. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, A255.	0.8	2
20	Non-linear retinal processing supports invariance during fixational eye movements. Vision Research, 2016, 118, 158-170.	0.7	7
21	Stimulus size dependence of hue changes induced by chromatic surrounds. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, A267.	0.8	2
22	Contextual processing of brightness and color in Mongolian gerbils. Journal of Vision, 2015, 15, 13-13.	0.1	34
23	â€œTiltâ€•in color space: Hue changes induced by chromatic surrounds. Journal of Vision, 2015, 15, 17.	0.1	22
24	Framework for Collection of Electrophysiology Data. , 2015, , .		0
25	Neo: an object model for handling electrophysiology data in multiple formats. Frontiers in Neuroinformatics, 2014, 8, 10.	1.3	120
26	Data management routines for reproducible research using the G-Node Python Client library. Frontiers in Neuroinformatics, 2014, 8, 15.	1.3	15
27	Integrated platform and API for electrophysiological data. Frontiers in Neuroinformatics, 2014, 8, 32.	1.3	9
28	NeuronDepot: keeping your colleagues in sync by combining modern cloud storage services, the local file system, and simple web applications. Frontiers in Neuroinformatics, 2014, 8, 55.	1.3	3
29	Color Discrimination with Broadband Photoreceptors. Current Biology, 2013, 23, 2375-2382.	1.8	123
30	Framework for automatic generation of graphical layout compatible with multiple platforms. , 2013, , .		0
31	A distributed code for color in natural scenes derived from center-surround filtered cone signals. Frontiers in Psychology, 2013, 4, 661.	1.1	10
32	CoCoMac 2.0 and the future of tract-tracing databases. Frontiers in Neuroinformatics, 2012, 6, 30.	1.3	140
33	Flexible Specification of Data Models for Neuroscience Databases. , 2011, , .		0
34	Stimulation with a Wireless Intraocular Epiretinal Implant Elicits Visual Percepts in Blind Humans. , 2011, 52, 449.		143
35	A Bottom-up Approach to Data Annotation in Neurophysiology. Frontiers in Neuroinformatics, 2011, 5, 16.	1.3	53
36	Automated generation of compartmental models via database tools for neurophysiology data management, analysis, and simulation. BMC Neuroscience, 2011, 12, .	0.8	0

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37	Macaque structural connectivity revisited: CoCoMac 2.0. BMC Neuroscience, 2011, 12, .	0.8	4
38	A Database System for Electrophysiological Data. Lecture Notes in Computer Science, 2011, , 1-14.	1.0	5
39	Perisaccadic mislocalization as optimal percept. Journal of Vision, 2010, 10, 19-19.	0.1	15
40	Using Spatiotemporal Correlations to Learn Topographic Maps for Invariant Object Recognition. Journal of Neurophysiology, 2009, 102, 953-964.	0.9	11
41	Unsupervised learning of head-centered representations in a network of spiking neurons. BMC Neuroscience, 2009, 10, .	0.8	0
42	Depth perception during saccades. Journal of Vision, 2008, 8, 27-27.	0.1	5
43	Perceptual evidence for saccadic updating of color stimuli. Journal of Vision, 2008, 8, 9-9.	0.1	55
44	Cone selectivity derived from the responses of the retinal cone mosaic to natural scenes. Journal of Vision, 2007, 7, 6.	0.1	40
45	Coding the presence of visual objects in a recurrent neural network of visual cortex. BioSystems, 2007, 89, 216-226.	0.9	14
46	Inhomogeneous retino-cortical mapping is supported and stabilized with correlation-learning during self-motion. BioSystems, 2007, 89, 264-272.	0.9	1
47	Scale-invariance of receptive field properties in primary visual cortex. BMC Neuroscience, 2007, 8, 38.	0.8	14
48	Adaptive Feedback Inhibition Improves Pattern Discrimination Learning. Lecture Notes in Computer Science, 2006, , 21-32.	1.0	1
49	interindividual variation in human color categories: evidence against strong influence of language. Behavioral and Brain Sciences, 2005, 28, 510-510.	0.4	1
50	Spike count distributions, factorizability, and contextual effects in area V1. Neurocomputing, 2004, 58-60, 893-900.	3.5	1
51	Modeling color percepts of dichromats. Vision Research, 2004, 44, 2843-2855.	0.7	85
52	Representation of Color Stimuli in Awake Macaque Primary Visual Cortex. Neuron, 2003, 37, 681-691.	3.8	252
53	Spatiochromatic Receptive Field Properties Derived from Information-Theoretic Analyses of Cone Mosaic Responses to Natural Scenes. Neural Computation, 2003, 15, 397-417.	1.3	57
54	Color opponency is an efficient representation of spectral properties in natural scenes. Vision Research, 2002, 42, 2095-2103.	0.7	110

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55	Chromatic structure of natural scenes. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2001, 18, 65.	0.8	89
56	Nonlocal interactions in color perception: nonlinear processing of chromatic signals from remote inducers. Vision Research, 2001, 41, 1535-1546.	0.7	46
57	Introduction to Neurophysiology of the Primate Visual System. , 2001, , 1-19.		0
58	The Spectral Independent Components of Natural Scenes. Lecture Notes in Computer Science, 2000, , 527-534.	1.0	9
59	The Craikâ€"O'Brienâ€"Cornsweet Illusion in Colour: Quantitative Characterisation and Comparison with Luminance. Perception, 1997, 26, 1423-1430.	0.5	19
60	A simple model of human foveal ganglion cell responses to hyperacuity stimuli. Journal of Computational Neuroscience, 1996, 3, 73-82.	0.6	15
61	Perceptual spaces and their symmetries: The geometry of color space. , 0, 1, .		2
62	MorphDepot and its points of interaction for new software developments in the field of single cell research.. Frontiers in Neuroinformatics, 0, 7, .	1.3	0